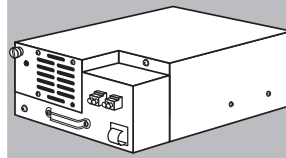


hp StorageWorks

ESL E-Series Ultrium 460-FC Drive Replacement

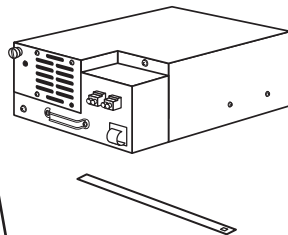
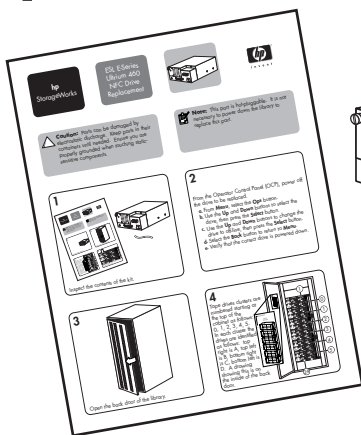


Caution: Parts can be damaged by electrostatic discharge. Keep parts in their containers until needed. Ensure you are properly grounded when touching static-sensitive components.



Note: This part is hot-swappable. It is not necessary to power down the library to replace this part.

1



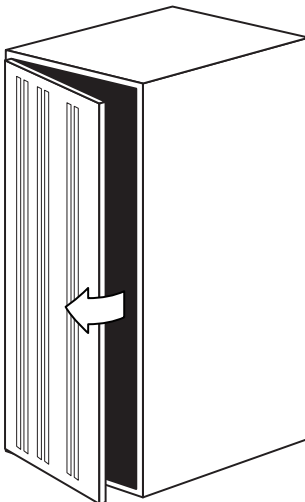
Inspect the contents of the kit.

2

From the Operator Control Panel (OCP), power off the drive to be replaced.

- From **Menu**, select the **Ops** button.
- Use the **Up** and **Down** buttons to select the drive, then press the **Select** button.
- Use the **Up** and **Down** buttons to change the drive to off-line, then press the **Select** button.
- Select the **Back** button to return to **Menu**.
- Verify that the correct drive is powered down.

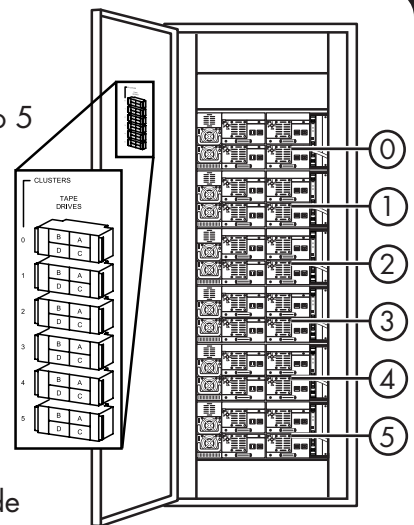
3



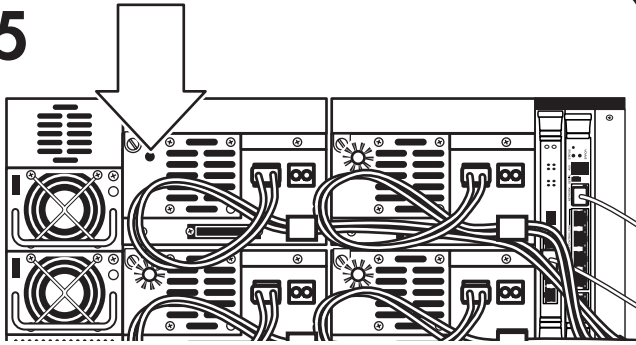
Open the back door of the library.

4

Drive clusters are numbered from 0 to 5 starting at the top of the cabinet. In each drive cluster the drives are identified as follows: top right is A, top left is B, bottom right is C, bottom left is D. A drawing of the drive cluster is located on the inside of the back door.



5



Identify the drive to be replaced.

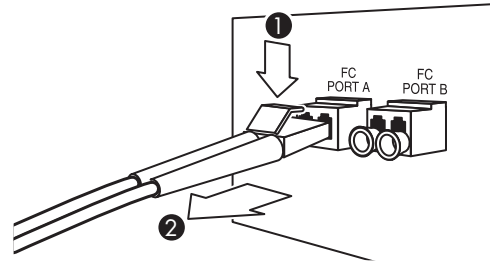
The LED of the drive to be replaced will be off.



CAUTION: To avoid damaging the drive, do not remove it if the LED is still lit. See step 2 to power off the drive.

6

Drive Removal

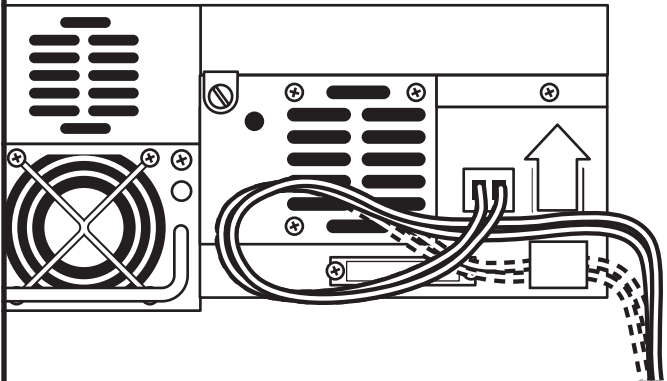


Disconnect the Fibre Channel (FC) cable from the drive to be replaced by pressing down on the cable connector tab and pulling the connector away from the drive.



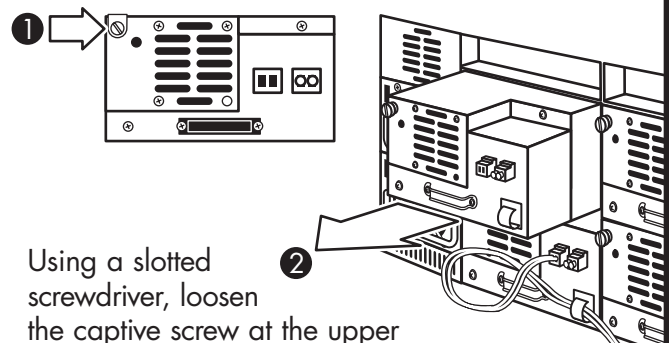
CAUTION: To avoid damaging FC cables, do not sharply bend or pinch them.

7



Remove the FC cable from the cable clip.

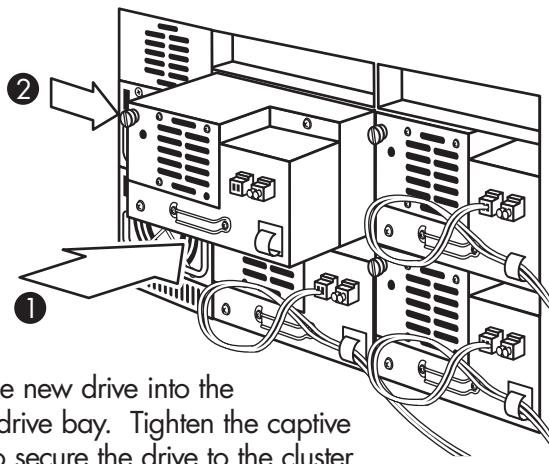
8



Using a slotted screwdriver, loosen the captive screw at the upper left corner of the drive module. Move the FC cable to the side and out of the way. Grasp the drive handle and pull the drive from its bay.

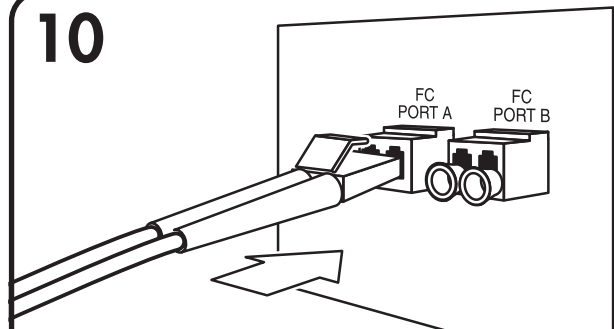
9

Drive Replacement



Insert the new drive into the vacant drive bay. Tighten the captive screw to secure the drive to the cluster.

10



Connect the FC cable to the new drive. The FC cable connector clicks into place. Insert the cable into the cable clip on the drive.



CAUTION: To avoid damaging FC cables, do not sharply bend or pinch them. Allow a radial bend when reattaching the FC cables.



Note: If needed, the tie wrap provided with this kit can be used to help keep the FC cables clear of the drive cluster below by attaching the cables to the drive handle.

11

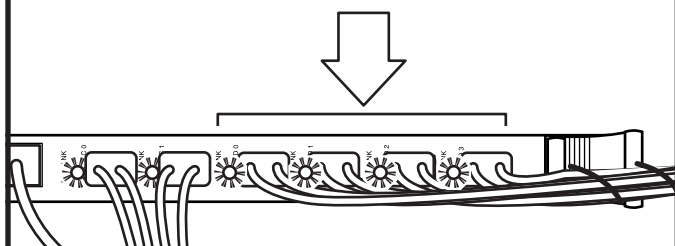
Power on the drive by completing the following steps from the OCP for the new drive.

- From **Menu**, select the **Ops** button.
- Use the **Up** and **Down** buttons to select the drive, then press the **Select** button.
- Use the **Up** and **Down** buttons to change the drive to on-line, then press the **Select** button.
- Select the **Back** button to return to **Menu**.

12

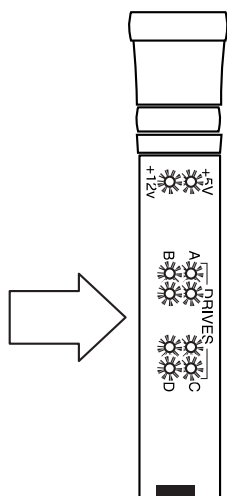
Use the Command View ESL user interface to reboot the interface controller card. Refer to the *HP StorageWorks Interface Manager and Command View ESL User Guide* for detailed procedures.

13



Verify that the FC port LED on the FC interface controller card is green.

14

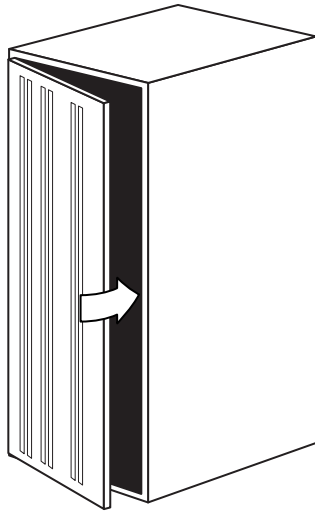


The LED for the replaced drive and its associated cluster controller card LED should be green.

15

Make sure that Command View ESL recognizes the replaced drive using the Command View ESL console. Refer to the *HP StorageWorks Interface Manager and Command View ESL User Guide* for detailed procedures.

16



Close the back door of the library.

17

Firmware Upgrade

If necessary, upgrade the drive firmware using the Interface Manager's command-line interface. Refer to the *HP StorageWorks Interface Manager and Command View ESL User Guide* for detailed procedures on upgrading drive firmware.

Getting help

- HP product information:
<http://www.hp.com/products/tapestorage>
- HP technical support and phone numbers:
<http://www.hp.com/support>
- HP StorageWorks Library and Tape Tools (L&TT) diagnostic software:
<http://www.hp.com/support/tapetools>
- Interface Manager and HP StorageWorks Command View ESL:
<http://www.hp.com/support/cvesl>

© Copyright 2004 Hewlett-Packard Development Company, L.P.

First Edition (March 2004)
Part Number: 358832-001



358832-001

